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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,660	01/18/2001	Wen Tong	11969ROUS02U	6272

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EXAMINER

HSU, ALPUS

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,660

Applicant(s)

TONG ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,36,42 and 48-57 is/are pending in the application.
- 4a) Of the above claim(s) 48-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,36 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Newly submitted claims 48-57 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

I. Claims 1-7, 36 and 42, drawn to operation of a wireless transmitter, classified in class 370, subclass 328.

II. Claims 48-57, drawn to operation of a wireless transmission with turbo coding and automatic data retransmission, classified in class 714, subclass 751.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single Combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as turbo coder/decoder for use in a wireless communication. See MPEP 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a Separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims **48-57** are **withdrawn** from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-7, 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anders Nystrom et al. in US Patent No. 6, 189, 123 (of record) in view of Izumi et al. in European Patent Application No. EP 0 964 534 A1 (newly cited).

Regarding claims 1, 36 and 42, Anders Nystrom discloses a method, a base station, and a plurality of software instructions executed by a base station for transmitting an encoded block of digital data, which is comprised of portions of digital data and makes up a transmission set, to a receiver in a first transmission (col. 7, lines 9-24). If a determination is made that the transmission set was not successfully decoded, the receiver makes a request for retransmission (col. 49-62). The same transmission set cannot be retransmitted until another dissimilar set is first transmitted (col. 8, lines 7-9), and any selected portion of any selected one or more encoded versions of the block of symbols may be retransmitted (col. 9, lines 61-64). This meets the limitation of sending a first block portion of the original transmission set in a retransmission, wherein the original transmission set contained more than one block portion. Anders Nystrom also discloses that the retransmission set may be formed from a second encoded version of the

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original digital data block (col. 10, lines 53-57), but fails to expressly disclose that the second encoded version is sent at a different transmission data rate, which is well known in the art and commonly used in data communications field for quality assurance purpose. Izumi et al., for example, discloses a scheme of data retransmissions with successively lower transmission rate (abstract, col. 4, line 41 to col. 5, line 15). Therefore, it would have been obvious to a person of ordinary skill at the time the invention was made, to use a different transmission data rate in sending the data retransmission since one of ordinary skill in the art would have been motivated to do this in order to have a better chance of successfully decoding the original digital data block after the retransmission to improve the data quality assurance.

Regarding claims 2-4, Anders Nystrom discloses successively redundant, iterative transmission of addition transmission sets can be performed (col. 7, lines 63-67). Anders Nystrom fails to expressly disclose including in a data retransmission by inserting a different portion of the originally encoded digital data blocks, which would have been obvious to a person of ordinary skill in the art to implement since one of ordinary skill in the art would have been motivated to do this in order to provide additional copies of portions of the data block that were in error, thus resulting in a better chance of successfully decoding the original data block.

Regarding claim 5, as stated above, Izumi et al. discloses using technique of data retransmissions with successively lower transmission.

Regarding claims 6 and 7, Anders Nystrom discloses that the sending station may be a radio base station while the receiving station may be a mobile terminal, and vice versa (col. 6, lines 52-58).

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ross and Doetsch et al. are additionally cited to show the feature of packet transmission with ARQ protocol and turbo coding/decoding scheme similar to the claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH



Alpus H. Hsu
Primary Examiner
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